5

Claims

1. A system for receiving data signals, comprising

a radio receiver including a baseband processor for providing serial data signals composed of data frames each including a packet payload,

means for encapsulating said data frames within Ethernet packets,

a transmission link for conveying said Ethernet packets, and

means for receiving the Ethernet packets from said link and de-encapsulating said Ethernet packets to recover said data frames

- 2. A system according to claim 1 and further comprising means, coupled to receive said data frames from said means for receiving, for converting said data frames into addressed Ethernet packets
- 3. A system according to claim 1 and including means for tagging said data frames before they are encapsulated within Ethernet packets
- 4. A system according to claim 1 wherein the means for encapsulating inserts at least one of said data frames followed by padding data into the message section of an Ethernet frame
- 5. A system according to claim 1 wherein said radio receiver is a spread spectrum radio receiver

25

5

6. A system for receiving data signals and coupling data signals to an Ethernet network, comprising

a dumb node comprising a radio receiver and an encapsulator, said radio receiver including a baseband processor for providing serial data signals composed of data frames each including a packet payload, and said encapsulator including means for encapsulating said data frames within temporary Ethernet packets,

an intelligent node comprising a de-encapsulator, and a protocol processor for providing addressed Ethernet packets for transmission in said network, and

a physical link coupling said dunb node with said intelligent node,

wherein

said encapsulator is coupled to said physical link to send said temporary Ethernet packets to said de-encapsulator,

said de-encapsulator includes means for receiving temporary Ethernet packets from said link and de-encapsulating said temporary Ethernet packets to recover said data frames, and

said protocol processor includes means for converting said data frames into said addressed Ethernet packets

5

- 7. A system according to claim 6 wherein said encapsulator includes means for tagging said data frames before they are encapsulated within Ethernet packets
- 8. A system according to claim 6 wherein said encapsulator includes means for inserting at least one of said data frames followed by padding data into a message section of one of said temporary Ethernet packets